

What is claimed:

1. Isolated nucleic acid having at least 80% nucleic acid sequence identity to:

5 a nucleotide sequence encoding the polypeptide shown in Figure 3 (SEQ ID NO:3), Figure 5 (SEQ ID NO:5), Figure 7 (SEQ ID NO:7), Figure 9 (SEQ ID NO:9), Figure 11 (SEQ ID NO:11), Figure 13 (SEQ ID NO:13), Figure 15 (SEQ ID NO:15), Figure 17 (SEQ ID NO:17), Figure 19 (SEQ ID NO:19), Figure 21 (SEQ ID NO:21), Figure 23 (SEQ ID NO:23), Figure 25 (SEQ ID NO:25), Figure 27 (SEQ ID NO:27), Figure 29 (SEQ ID NO:29), Figure 31 (SEQ ID NO:31), Figure 33 (SEQ ID NO:33),
10 Figure 35 (SEQ ID NO:35), Figure 37 (SEQ ID NO:37), Figure 39 (SEQ ID NO:39), Figure 41 (SEQ ID NO:41), Figure 43 (SEQ ID NO:43), Figure 45 (SEQ ID NO:45), Figure 47 (SEQ ID NO:47), Figure 49 (SEQ ID NO:49), Figure 51 (SEQ ID NO:51), Figure 53 (SEQ ID NO:53), Figure 55 (SEQ ID NO:55), Figure 57 (SEQ ID NO:57), Figure 59 (SEQ ID NO:59), Figure 61 (SEQ ID NO:61), Figure 63 (SEQ ID NO:63), Figure 65 (SEQ ID NO:65), Figure 67 (SEQ ID NO:67), Figure 69 (SEQ ID NO:69), Figure 71 (SEQ ID NO:71), Figure 73 (SEQ ID NO:73), Figure 75 (SEQ ID NO:75), Figure 77 (SEQ ID NO:77),
15 Figure 79 (SEQ ID NO:79), Figure 81 (SEQ ID NO:81), Figure 83 (SEQ ID NO:83), Figure 85 (SEQ ID NO:85), Figure 87 (SEQ ID NO:87), Figure 89 (SEQ ID NO:89), Figure 91 (SEQ ID NO:91), Figure 93 (SEQ ID NO:93), Figure 95 (SEQ ID NO:95), Figure 97 (SEQ ID NO:97), Figure 99 (SEQ ID NO:99), Figure 101 (SEQ ID NO:101), Figure 103 (SEQ ID NO:103), Figure 105 (SEQ ID NO:105), Figure 107 (SEQ ID NO:107), Figure 109 (SEQ ID NO:109), Figure 111 (SEQ ID NO:111), Figure 113 (SEQ ID NO:113), Figure 115 (SEQ ID NO:115), Figure 117 (SEQ ID NO:117), Figure 119 (SEQ ID NO:119), Figure 121 (SEQ ID NO:121), Figure 123 (SEQ ID NO:123), Figure 125 (SEQ ID NO:125), Figure 127 (SEQ ID NO:127), Figure 129 (SEQ ID NO:129), Figure 131 (SEQ ID NO:131), Figure 133 (SEQ ID NO:133), Figure 135 (SEQ ID NO:135), Figure 137 (SEQ ID NO:137), Figure 139 (SEQ ID NO:139),
20 Figure 141 (SEQ ID NO:141), Figure 143 (SEQ ID NO:143), Figure 145 (SEQ ID NO:145), Figure 147 (SEQ ID NO:147), Figure 149 (SEQ ID NO:149), Figure 151 (SEQ ID NO:151), Figure 153 (SEQ ID NO:153), Figure 155 (SEQ ID NO:155), Figure 157 (SEQ ID NO:157), Figure 159 (SEQ ID NO:159), Figure 161 (SEQ ID NO:161), Figure 163 (SEQ ID NO:163), Figure 165 (SEQ ID NO:165), Figure 167 (SEQ ID NO:167), Figure 169 (SEQ ID NO:169), Figure 171 (SEQ ID NO:171), Figure 173 (SEQ ID NO:173), Figure 175 (SEQ ID NO:175), Figure 177 (SEQ ID NO:177), Figure 179 (SEQ ID NO:179), Figure 181 (SEQ ID NO:181), Figure 183 (SEQ ID NO:183), Figure 185 (SEQ ID NO:185), Figure 187 (SEQ ID NO:187), Figure 189 (SEQ ID NO:189), Figure 191 (SEQ ID NO:191), Figure 193 (SEQ ID NO:193), Figure 195 (SEQ ID NO:195), Figure 197 (SEQ ID NO:197), Figure 199 (SEQ ID NO:199), Figure 201 (SEQ ID NO:201), Figure 203 (SEQ ID NO:203), Figure 205 (SEQ ID NO:205), Figure 207 (SEQ ID NO:207), Figure 209 (SEQ ID NO:209), Figure 211 (SEQ ID NO:211), Figure 213 (SEQ ID NO:213), Figure 215 (SEQ ID NO:215), Figure 217 (SEQ ID NO:217), Figure 219 (SEQ ID NO:219), Figure 221 (SEQ ID NO:221), Figure 225 (SEQ ID NO:225), Figure 227 (SEQ ID NO:227), Figure 229 (SEQ ID NO:229), Figure 232 (SEQ ID NO:232), Figure 235 (SEQ ID NO:235), Figure 237 (SEQ ID NO:237)

NO:237), Figure 239 (SEQ ID NO:239), Figure 243 (SEQ ID NO:243), Figure 246 (SEQ ID NO:246), Figure 248 (SEQ ID NO:248), Figure 250 (SEQ ID NO:250), Figure 252 (SEQ ID NO:252), Figure 254 (SEQ ID NO:254), Figure 256 (SEQ ID NO:256), Figure 258 (SEQ ID NO:258), Figure 260 (SEQ ID NO:260), Figure 262 (SEQ ID NO:262), Figure 264 (SEQ ID NO:264), Figure 266 (SEQ ID NO:266), Figure 268 (SEQ ID NO:268), Figure 270 (SEQ ID NO:270), Figure 272 (SEQ ID NO:272), Figure 274 (SEQ ID NO:274), Figure 276 (SEQ ID NO:276), Figure 278 (SEQ ID NO:278), Figure 280 (SEQ ID NO:280), Figure 282 (SEQ ID NO:282), Figure 284 (SEQ ID NO:284), Figure 286 (SEQ ID NO:286), Figure 288 (SEQ ID NO:288), Figure 290 (SEQ ID NO:290), Figure 292 (SEQ ID NO:292), Figure 294 (SEQ ID NO:294), Figure 296 (SEQ ID NO:296), Figure 298 (SEQ ID NO:298), Figure 300 (SEQ ID NO:300), Figure 302 (SEQ ID NO:302), Figure 304 (SEQ ID NO:304), Figure 306 (SEQ ID NO:306), Figure 308 (SEQ ID NO:308), Figure 310 (SEQ ID NO:310), Figure 312A-B (SEQ ID NO:312), Figure 314 (SEQ ID NO:314), Figure 316 (SEQ ID NO:316), Figure 318 (SEQ ID NO:318), Figure 320 (SEQ ID NO:320), Figure 324 (SEQ ID NO:324), Figure 326 (SEQ ID NO:326), Figure 329 (SEQ ID NO:329), Figure 332 (SEQ ID NO:332), Figure 334 (SEQ ID NO:334), Figure 336 (SEQ ID NO:336), Figure 338 (SEQ ID NO:338), Figure 340 (SEQ ID NO:340), Figure 342 (SEQ ID NO:342), Figure 344 (SEQ ID NO:344), Figure 346 (SEQ ID NO:346), Figure 348 (SEQ ID NO:348), Figure 350 (SEQ ID NO:350), Figure 352 (SEQ ID NO:352), Figure 354 (SEQ ID NO:354), Figure 356 (SEQ ID NO:356), Figure 358 (SEQ ID NO:358), Figure 360 (SEQ ID NO:360), Figure 362 (SEQ ID NO:362), Figure 364 (SEQ ID NO:364), Figure 366 (SEQ ID NO:366), Figure 368 (SEQ ID NO:368), Figure 370 (SEQ ID NO:370), Figure 372 (SEQ ID NO:372), Figure 375 (SEQ ID NO:375), Figure 377 (SEQ ID NO:377), Figure 379 (SEQ ID NO:379), Figure 381 (SEQ ID NO:381), Figure 383 (SEQ ID NO:383), Figure 385 (SEQ ID NO:385), Figure 387 (SEQ ID NO:387), Figure 389 (SEQ ID NO:389), Figure 392 (SEQ ID NO:392), Figure 394 (SEQ ID NO:394), Figure 396 (SEQ ID NO:396), Figure 399 (SEQ ID NO:399), Figure 403 (SEQ ID NO:403), Figure 405 (SEQ ID NO:405), Figure 411 (SEQ ID NO:411), Figure 413 (SEQ ID NO:413), Figure 415 (SEQ ID NO:415), Figure 417 (SEQ ID NO:417), Figure 419 (SEQ ID NO:419), Figure 421 (SEQ ID NO:421), Figure 423 (SEQ ID NO:423), Figure 425 (SEQ ID NO:425), Figure 427 (SEQ ID NO:427), Figure 429 (SEQ ID NO:429), Figure 431 (SEQ ID NO:431), Figure 433 (SEQ ID NO:433), Figure 435 (SEQ ID NO:435), Figure 437 (SEQ ID NO:437), Figure 439 (SEQ ID NO:439), Figure 441 (SEQ ID NO:441), Figure 443 (SEQ ID NO:443), Figure 445 (SEQ ID NO:445), Figure 447 (SEQ ID NO:447), Figure 449 (SEQ ID NO:449), Figure 451 (SEQ ID NO:451), Figure 453 (SEQ ID NO:453), Figure 455 (SEQ ID NO:455), Figure 457 (SEQ ID NO:457), Figure 460 (SEQ ID NO:460), Figure 462 (SEQ ID NO:462), Figure 464 (SEQ ID NO:464), Figure 466 (SEQ ID NO:466), Figure 468 (SEQ ID NO:468), Figure 472 (SEQ ID NO:472), Figure 474 (SEQ ID NO:474), Figure 476 (SEQ ID NO:476), Figure 478 (SEQ ID NO:478), Figure 480 (SEQ ID NO:480), Figure 482 (SEQ ID NO:482), Figure 484 (SEQ ID NO:484), Figure 486 (SEQ ID NO:486), Figure 488 (SEQ ID NO:488), Figure 490 (SEQ ID NO:490), Figure 492 (SEQ ID NO:492), Figure 494 (SEQ ID NO:494), Figure 496 (SEQ ID NO:496), Figure 498 (SEQ ID NO:498), Figure 500 (SEQ ID NO:500), Figure 502 (SEQ ID NO:502), Figure 504 (SEQ ID NO:504) or Figure 506 (SEQ ID NO:506).

2. Isolated nucleic acid having at least 80% nucleic acid sequence identity to a nucleotide sequence selected from the group consisting of the nucleotide sequence shown in Figure 1 (SEQ ID NO:1), Figure 2A-B (SEQ ID NO:2), Figure 4 (SEQ ID NO:4), Figure 6 (SEQ ID NO:6), Figure 8 (SEQ ID NO:8), Figure 10 (SEQ ID NO:10), Figure 12 (SEQ ID NO:12), Figure 14 (SEQ ID NO:14), Figure 16 (SEQ ID NO:16), Figure 18 (SEQ ID NO:18), Figure 20 (SEQ ID NO:20), Figure 22 (SEQ ID NO:22), Figure 24 (SEQ ID NO:24), Figure 26 (SEQ ID NO:26), Figure 28 (SEQ ID NO:28), Figure 30 (SEQ ID NO:30), Figure 32 (SEQ ID NO:32), Figure 34 (SEQ ID NO:34), Figure 36A-B (SEQ ID NO:36), Figure 38 (SEQ ID NO:38), Figure 40 (SEQ ID NO:40), Figure 42 (SEQ ID NO:42), Figure 44A-B (SEQ ID NO:44), Figure 46A-B (SEQ ID NO:46), Figure 48 (SEQ ID NO:48), Figure 50A-B (SEQ ID NO:50), Figure 52 (SEQ ID NO:52), Figure 54 (SEQ ID NO:54), Figure 56 (SEQ ID NO:56), Figure 58 (SEQ ID NO:58), Figure 60 (SEQ ID NO:60), Figure 62 (SEQ ID NO:62), Figure 64 (SEQ ID NO:64), Figure 66 (SEQ ID NO:66), Figure 68 (SEQ ID NO:68), Figure 70 (SEQ ID NO:70), Figure 72A-B (SEQ ID NO:72), Figure 74 (SEQ ID NO:74), Figure 76 (SEQ ID NO:76), Figure 78 (SEQ ID NO:78), Figure 80 (SEQ ID NO:80), Figure 82 (SEQ ID NO:82), Figure 84 (SEQ ID NO:84), Figure 86 (SEQ ID NO:86), Figure 88 (SEQ ID NO:88), Figure 90 (SEQ ID NO:90), Figure 92 (SEQ ID NO:92), Figure 94A-B (SEQ ID NO:94), Figure 96 (SEQ ID NO:96), Figure 98 (SEQ ID NO:98), Figure 100 (SEQ ID NO:100), Figure 102 (SEQ ID NO:102), Figure 104 (SEQ ID NO:104), Figure 106 (SEQ ID NO:106), Figure 108 (SEQ ID NO:108), Figure 110A-B (SEQ ID NO:110), Figure 112 (SEQ ID NO:112), Figure 114 A-B (SEQ ID NO:114), Figure 116 (SEQ ID NO:116), Figure 118 (SEQ ID NO:118), Figure 120 (SEQ ID NO:120), Figure 122A-B (SEQ ID NO:122), Figure 124A-B (SEQ ID NO:124), Figure 126 (SEQ ID NO:126), Figure 128A-B (SEQ ID NO:128), Figure 130 (SEQ ID NO:130), Figure 132 (SEQ ID NO:132), Figure 134 (SEQ ID NO:134), Figure 136 (SEQ ID NO:136), Figure 138 (SEQ ID NO:138), Figure 140 (SEQ ID NO:140), Figure 142 (SEQ ID NO:142), Figure 144A-B (SEQ ID NO:144), Figure 146 (SEQ ID NO:146), Figure 148 (SEQ ID NO:148), Figure 150 (SEQ ID NO:150), Figure 152 (SEQ ID NO:152), Figure 154 (SEQ ID NO:154), Figure 156A-B (SEQ ID NO:156), Figure 158 (SEQ ID NO:158), Figure 160 (SEQ ID NO:160), Figure 162 (SEQ ID NO:162), Figure 164 (SEQ ID NO:164), Figure 166A-B (SEQ ID NO:166), Figure 168A-B (SEQ ID NO:168), Figure 170 (SEQ ID NO:170), Figure 172 (SEQ ID NO:172), Figure 174A-B (SEQ ID NO:174), Figure 176 (SEQ ID NO:176), Figure 178A-B (SEQ ID NO:178), Figure 180 (SEQ ID NO:180), Figure 182 (SEQ ID NO:182), Figure 184 (SEQ ID NO:184), Figure 186 (SEQ ID NO:186), Figure 188 (SEQ ID NO:188), Figure 190A-B (SEQ ID NO:190), Figure 192A-B (SEQ ID NO:192), Figure 194 (SEQ ID NO:194), Figure 196 (SEQ ID NO:196), Figure 198 (SEQ ID NO:198), Figure 200A-B (SEQ ID NO:200), Figure 202 (SEQ ID NO:202), Figure 204 (SEQ ID NO:204), Figure 206 (SEQ ID NO:206), Figure 208 (SEQ ID NO:208), Figure 210 (SEQ ID NO:210), Figure 212 (SEQ ID NO:212), Figure 214 (SEQ ID NO:214), Figure 216A-B (SEQ ID NO:216), Figure 218 (SEQ ID NO:218), Figure 220A-B (SEQ ID NO:220), Figure 222 (SEQ ID NO:222), Figure 223 (SEQ ID NO:223), Figure 224 (SEQ ID NO:224), Figure 226 (SEQ ID NO:226), Figure 228 (SEQ ID NO:228),

Figure 230 (SEQ ID NO:230), Figure 231 (SEQ ID NO:231), Figure 233 (SEQ ID NO:233), Figure 234 (SEQ ID NO:234), Figure 236A-B (SEQ ID NO:236), Figure 238 (SEQ ID NO:238), Figure 240 (SEQ ID NO:240), Figure 241 (SEQ ID NO:241), Figure 242 (SEQ ID NO:242), Figure 244 (SEQ ID NO:244), Figure 245 (SEQ ID NO:245), Figure 247A-B (SEQ ID NO:247), Figure 249 (SEQ ID NO:249), Figure 251 (SEQ ID NO:251), Figure 253 (SEQ ID NO:253), Figure 255 (SEQ ID NO:255), Figure 257 (SEQ ID NO:257), Figure 259 (SEQ ID NO:259), Figure 261 (SEQ ID NO:261), Figure 263 (SEQ ID NO:263), Figure 265 (SEQ ID NO:265), Figure 267 (SEQ ID NO:267), Figure 269 (SEQ ID NO:269), Figure 271 (SEQ ID NO:271), Figure 273 (SEQ ID NO:273), Figure 275 (SEQ ID NO:275), Figure 277 (SEQ ID NO:277), Figure 279 (SEQ ID NO:279), Figure 281 (SEQ ID NO:281), Figure 283 (SEQ ID NO:283), Figure 285 (SEQ ID NO:285), Figure 287 (SEQ ID NO:287), Figure 289A-B (SEQ ID NO:289), Figure 291 (SEQ ID NO:291), Figure 293A-B (SEQ ID NO:293), Figure 295 (SEQ ID NO:295), Figure 297 (SEQ ID NO:297), Figure 299A-B (SEQ ID NO:299), Figure 301 (SEQ ID NO:301), Figure 303A-B (SEQ ID NO:303), Figure 305A-B (SEQ ID NO:305), Figure 307 (SEQ ID NO:307), Figure 309 (SEQ ID NO:309), Figure 311A-D (SEQ ID NO:311), Figure 313 (SEQ ID NO:313), Figure 315A-B (SEQ ID NO:315), Figure 317 (SEQ ID NO:317), Figure 319A-B (SEQ ID NO:319), Figure 321 (SEQ ID NO:321), Figure 322 (SEQ ID NO:322), Figure 323 (SEQ ID NO:323), Figure 325 (SEQ ID NO:325), Figure 327 (SEQ ID NO:327), Figure 328 (SEQ ID NO:328), Figure 330 (SEQ ID NO:330), Figure 331 (SEQ ID NO:331), Figure 333 (SEQ ID NO:333), Figure 335A-B (SEQ ID NO:335), Figure 337 (SEQ ID NO:337), Figure 339 (SEQ ID NO:339), Figure 341 (SEQ ID NO:341), Figure 343 (SEQ ID NO:343), Figure 345 (SEQ ID NO:345), Figure 347 (SEQ ID NO:347), Figure 349 (SEQ ID NO:349), Figure 351 (SEQ ID NO:351), Figure 353 (SEQ ID NO:353), Figure 355 (SEQ ID NO:355), Figure 357 (SEQ ID NO:357), Figure 359 (SEQ ID NO:359), Figure 361A-B (SEQ ID NO:361), Figure 363 (SEQ ID NO:363), Figure 365 (SEQ ID NO:365), Figure 367A-C (SEQ ID NO:367), Figure 369 (SEQ ID NO:369), Figure 371 (SEQ ID NO:371), Figure 373A-B (SEQ ID NO:373), Figure 374 (SEQ ID NO:374), Figure 376 (SEQ ID NO:376), Figure 378 (SEQ ID NO:378), Figure 380 (SEQ ID NO:380), Figure 382 (SEQ ID NO:382), Figure 384A-B (SEQ ID NO:384), Figure 386 (SEQ ID NO:386), Figure 388 (SEQ ID NO:388), Figure 390 (SEQ ID NO:390), Figure 391 (SEQ ID NO:391), Figure 393 (SEQ ID NO:393), Figure 395A-B (SEQ ID NO:395), Figure 397 (SEQ ID NO:397), Figure 398A-B (SEQ ID NO:398), Figure 400 (SEQ ID NO:400), Figure 401 (SEQ ID NO:401), Figure 402A-B (SEQ ID NO:402), Figure 404 (SEQ ID NO:404), Figure 406 (SEQ ID NO:406), Figure 407 (SEQ ID NO:407), Figure 408 (SEQ ID NO:408), Figure 409 (SEQ ID NO:409), Figure 410 (SEQ ID NO:410), Figure 412 (SEQ ID NO:412), Figure 414 (SEQ ID NO:414), Figure 416 (SEQ ID NO:416), Figure 418 (SEQ ID NO:418), Figure 420A-B (SEQ ID NO:420), Figure 422 (SEQ ID NO:422), Figure 424A-B (SEQ ID NO:424), Figure 426 (SEQ ID NO:426), Figure 428 (SEQ ID NO:428), Figure 430 (SEQ ID NO:430), Figure 432 (SEQ ID NO:432), Figure 434 (SEQ ID NO:434), Figure 436A-B (SEQ ID NO:436), Figure 438A-B (SEQ ID NO:438), Figure 440A-B (SEQ ID NO:440), Figure 442A-B (SEQ ID NO:442), Figure 444A-B (SEQ ID NO:444), Figure 446A-B (SEQ ID NO:446), Figure 448 (SEQ ID NO:448), Figure 450A-B (SEQ ID NO:450), Figure 452 (SEQ ID NO:452), Figure

454 (SEQ ID NO:454), Figure 456 (SEQ ID NO:456), Figure 458 (SEQ ID NO:458), Figure 459 (SEQ ID NO:459), Figure 461 (SEQ ID NO:461), Figure 463A-B (SEQ ID NO:463), Figure 465 (SEQ ID NO:465), Figure 467 (SEQ ID NO:467), Figure 469A-B (SEQ ID NO:469), Figure 470A-B (SEQ ID NO:470), Figure 471A-C (SEQ ID NO:471), Figure 473 (SEQ ID NO:473), Figure 475 (SEQ ID NO:475), Figure 477 (SEQ ID NO:477), Figure 479 (SEQ ID NO:479), Figure 481A-B (SEQ ID NO:481), Figure 483 (SEQ ID NO:483), Figure 485 (SEQ ID NO:485), Figure 487 (SEQ ID NO:487), Figure 489 (SEQ ID NO:489), Figure 491A-B (SEQ ID NO:491), Figure 493 (SEQ ID NO:493), Figure 495 (SEQ ID NO:495), Figure 497 (SEQ ID NO:497), Figure 499 (SEQ ID NO:499), Figure 501 (SEQ ID NO:501), Figure 503 (SEQ ID NO:503) and Figure 505 (SEQ ID NO:505)

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3. Isolated nucleic acid having at least 80% nucleic acid sequence identity to a nucleotide sequence selected from the group consisting of the full-length coding sequence of the nucleotide sequence shown in Figure 1 (SEQ ID NO:1), Figure 2A-B (SEQ ID NO:2), Figure 4 (SEQ ID NO:4), Figure 6 (SEQ ID NO:6), Figure 8 (SEQ ID NO:8), Figure 10 (SEQ ID NO:10), Figure 12 (SEQ ID NO:12), Figure 14 (SEQ ID NO:14), Figure 16 (SEQ ID NO:16), Figure 18 (SEQ ID NO:18), Figure 20 (SEQ ID NO:20), Figure 22 (SEQ ID NO:22), Figure 24 (SEQ ID NO:24), Figure 26 (SEQ ID NO:26), Figure 28 (SEQ ID NO:28), Figure 30 (SEQ ID NO:30), Figure 32 (SEQ ID NO:32), Figure 34 (SEQ ID NO:34), Figure 36A-B (SEQ ID NO:36), Figure 38 (SEQ ID NO:38), Figure 40 (SEQ ID NO:40), Figure 42 (SEQ ID NO:42), Figure 44A-B (SEQ ID NO:44), Figure 46A-B (SEQ ID NO:46), Figure 48 (SEQ ID NO:48), Figure 50A-B (SEQ ID NO:50), Figure 52 (SEQ ID NO:52), Figure 54 (SEQ ID NO:54), Figure 56 (SEQ ID NO:56), Figure 58 (SEQ ID NO:58), Figure 60 (SEQ ID NO:60), Figure 62 (SEQ ID NO:62), Figure 64 (SEQ ID NO:64), Figure 66 (SEQ ID NO:66), Figure 68 (SEQ ID NO:68), Figure 70 (SEQ ID NO:70), Figure 72A-B (SEQ ID NO:72), Figure 74 (SEQ ID NO:74), Figure 76 (SEQ ID NO:76), Figure 78 (SEQ ID NO:78), Figure 80 (SEQ ID NO:80), Figure 82 (SEQ ID NO:82), Figure 84 (SEQ ID NO:84), Figure 86 (SEQ ID NO:86), Figure 88 (SEQ ID NO:88), Figure 90 (SEQ ID NO:90), Figure 92 (SEQ ID NO:92), Figure 94A-B (SEQ ID NO:94), Figure 96 (SEQ ID NO:96), Figure 98 (SEQ ID NO:98), Figure 100 (SEQ ID NO:100), Figure 102 (SEQ ID NO:102), Figure 104 (SEQ ID NO:104), Figure 106 (SEQ ID NO:106), Figure 108 (SEQ ID NO:108), Figure 110A-B (SEQ ID NO:110), Figure 112 (SEQ ID NO:112), Figure 114 A-B (SEQ ID NO:114), Figure 116 (SEQ ID NO:116), Figure 118 (SEQ ID NO:118), Figure 120 (SEQ ID NO:120), Figure 122A-B (SEQ ID NO:122), Figure 124A-B (SEQ ID NO:124), Figure 126 (SEQ ID NO:126), Figure 128A-B (SEQ ID NO:128), Figure 130 (SEQ ID NO:130), Figure 132 (SEQ ID NO:132), Figure 134 (SEQ ID NO:134), Figure 136 (SEQ ID NO:136), Figure 138 (SEQ ID NO:138), Figure 140 (SEQ ID NO:140), Figure 142 (SEQ ID NO:142), Figure 144A-B (SEQ ID NO:144), Figure 146 (SEQ ID NO:146), Figure 148 (SEQ ID NO:148), Figure 150 (SEQ ID NO:150), Figure 152 (SEQ ID NO:152), Figure 154 (SEQ ID NO:154), Figure 156A-B (SEQ ID NO:156), Figure 158 (SEQ ID NO:158), Figure 160 (SEQ ID NO:160), Figure 162 (SEQ ID NO:162), Figure 164 (SEQ ID NO:164), Figure 166A-B (SEQ ID NO:166), Figure 168A-B (SEQ ID NO:168), Figure 170 (SEQ ID NO:170), Figure 172 (SEQ ID

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NO:172), Figure 174A-B (SEQ ID NO:174), Figure 176 (SEQ ID NO:176), Figure 178A-B (SEQ ID NO:178), Figure 180 (SEQ ID NO:180), Figure 182 (SEQ ID NO:182), Figure 184 (SEQ ID NO:184), Figure 186 (SEQ ID NO:186), Figure 188 (SEQ ID NO:188), Figure 190A-B (SEQ ID NO:190), Figure 192A-B (SEQ ID NO:192), Figure 194 (SEQ ID NO:194), Figure 196 (SEQ ID NO:196), Figure 198 (SEQ ID NO:198), Figure 200A-B (SEQ ID NO:200), Figure 202 (SEQ ID NO:202), Figure 204 (SEQ ID NO:204), Figure 206 (SEQ ID NO:206), Figure 208 (SEQ ID NO:208), Figure 210 (SEQ ID NO:210), Figure 212 (SEQ ID NO:212), Figure 214 (SEQ ID NO:214), Figure 216A-B (SEQ ID NO:216), Figure 218 (SEQ ID NO:218), Figure 220A-B (SEQ ID NO:220), Figure 222 (SEQ ID NO:222), Figure 223 (SEQ ID NO:223), Figure 224 (SEQ ID NO:224), Figure 226 (SEQ ID NO:226), Figure 228 (SEQ ID NO:228), Figure 230 (SEQ ID NO:230), Figure 231 (SEQ ID NO:231), Figure 233 (SEQ ID NO:233), Figure 234 (SEQ ID NO:234), Figure 236A-B (SEQ ID NO:236), Figure 238 (SEQ ID NO:238), Figure 240 (SEQ ID NO:240), Figure 241 (SEQ ID NO:241), Figure 242 (SEQ ID NO:242), Figure 244 (SEQ ID NO:244), Figure 245 (SEQ ID NO:245), Figure 247A-B (SEQ ID NO:247), Figure 249 (SEQ ID NO:249), Figure 251 (SEQ ID NO:251), Figure 253 (SEQ ID NO:253), Figure 255 (SEQ ID NO:255), Figure 257 (SEQ ID NO:257), Figure 259 (SEQ ID NO:259), Figure 261 (SEQ ID NO:261), Figure 263 (SEQ ID NO:263), Figure 265 (SEQ ID NO:265), Figure 267 (SEQ ID NO:267), Figure 269 (SEQ ID NO:269), Figure 271 (SEQ ID NO:271), Figure 273 (SEQ ID NO:273), Figure 275 (SEQ ID NO:275), Figure 277 (SEQ ID NO:277), Figure 279 (SEQ ID NO:279), Figure 281 (SEQ ID NO:281), Figure 283 (SEQ ID NO:283), Figure 285 (SEQ ID NO:285), Figure 287 (SEQ ID NO:287), Figure 289A-B (SEQ ID NO:289), Figure 291 (SEQ ID NO:291), Figure 293A-B (SEQ ID NO:293), Figure 295 (SEQ ID NO:295), Figure 297 (SEQ ID NO:297), Figure 299A-B (SEQ ID NO:299), Figure 301 (SEQ ID NO:301), Figure 303A-B (SEQ ID NO:303), Figure 305A-B (SEQ ID NO:305), Figure 307 (SEQ ID NO:307), Figure 309 (SEQ ID NO:309), Figure 311A-D (SEQ ID NO:311), Figure 313 (SEQ ID NO:313), Figure 315A-B (SEQ ID NO:315), Figure 317 (SEQ ID NO:317), Figure 319A-B (SEQ ID NO:319), Figure 321 (SEQ ID NO:321), Figure 322 (SEQ ID NO:322), Figure 323 (SEQ ID NO:323), Figure 325 (SEQ ID NO:325), Figure 327 (SEQ ID NO:327), Figure 328 (SEQ ID NO:328), Figure 330 (SEQ ID NO:330), Figure 331 (SEQ ID NO:331), Figure 333 (SEQ ID NO:333), Figure 335A-B (SEQ ID NO:335), Figure 337 (SEQ ID NO:337), Figure 339 (SEQ ID NO:339), Figure 341 (SEQ ID NO:341), Figure 343 (SEQ ID NO:343), Figure 345 (SEQ ID NO:345), Figure 347 (SEQ ID NO:347), Figure 349 (SEQ ID NO:349), Figure 351 (SEQ ID NO:351), Figure 353 (SEQ ID NO:353), Figure 355 (SEQ ID NO:355), Figure 357 (SEQ ID NO:357), Figure 359 (SEQ ID NO:359), Figure 361A-B (SEQ ID NO:361), Figure 363 (SEQ ID NO:363), Figure 365 (SEQ ID NO:365), Figure 367A-C (SEQ ID NO:367), Figure 369 (SEQ ID NO:369), Figure 371 (SEQ ID NO:371), Figure 373A-B (SEQ ID NO:373), Figure 374 (SEQ ID NO:374), Figure 376 (SEQ ID NO:376), Figure 378 (SEQ ID NO:378), Figure 380 (SEQ ID NO:380), Figure 382 (SEQ ID NO:382), Figure 384A-B (SEQ ID NO:384), Figure 386 (SEQ ID NO:386), Figure 388 (SEQ ID NO:388), Figure 390 (SEQ ID NO:390), Figure 391 (SEQ ID NO:391), Figure 393 (SEQ ID NO:393), Figure 395A-B (SEQ ID NO:395), Figure 397 (SEQ ID NO:397), Figure 398A-B (SEQ ID NO:398), Figure 400 (SEQ

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5. A vector comprising the nucleic acid of Claim 1.

6. The vector of Claim 5 operably linked to control sequences recognized by a host cell transformed with the vector.

7. A host cell comprising the vector of Claim 5.

8. The host cell of Claim 7, wherein said cell is a CHO cell, an *E.coli* cell or a yeast cell.

9. A process for producing a PRO polypeptide comprising culturing the host cell of Claim 7 under conditions suitable for expression of said PRO polypeptide and recovering said PRO polypeptide from the cell culture.

10. An isolated polypeptide having at least 80% amino acid sequence identity to:

(a) an amino acid sequence of the polypeptide shown Figure 3 (SEQ ID NO:3), Figure 5 (SEQ ID NO:5), Figure 7 (SEQ ID NO:7), Figure 9 (SEQ ID NO:9), Figure 11 (SEQ ID NO:11), Figure 13 (SEQ ID NO:13), Figure 15 (SEQ ID NO:15), Figure 17 (SEQ ID NO:17), Figure 19 (SEQ ID NO:19), Figure 21 (SEQ ID NO:21), Figure 23 (SEQ ID NO:23), Figure 25 (SEQ ID NO:25), Figure 27

(SEQ ID NO:27), Figure 29 (SEQ ID NO:29), Figure 31 (SEQ ID NO:31), Figure 33 (SEQ ID NO:33), Figure 35 (SEQ ID NO:35), Figure 37 (SEQ ID NO:37), Figure 39 (SEQ ID NO:39), Figure 41 (SEQ ID NO:41), Figure 43 (SEQ ID NO:43), Figure 45 (SEQ ID NO:45), Figure 47 (SEQ ID NO:47), Figure 49 (SEQ ID NO:49), Figure 51 (SEQ ID NO:51), Figure 53 (SEQ ID NO:53), Figure 55 (SEQ ID NO:55),
5 Figure 57 (SEQ ID NO:57), Figure 59 (SEQ ID NO:59), Figure 61 (SEQ ID NO:61), Figure 63 (SEQ ID NO:63), Figure 65 (SEQ ID NO:65), Figure 67 (SEQ ID NO:67), Figure 69 (SEQ ID NO:69), Figure 71 (SEQ ID NO:71), Figure 73 (SEQ ID NO:73), Figure 75 (SEQ ID NO:75), Figure 77 (SEQ ID NO:77), Figure 79 (SEQ ID NO:79), Figure 81 (SEQ ID NO:81), Figure 83 (SEQ ID NO:83), Figure 85 (SEQ ID NO:85), Figure 87 (SEQ ID NO:87), Figure 89 (SEQ ID NO:89), Figure 91 (SEQ ID NO:91), Figure 93
10 (SEQ ID NO:93), Figure 95 (SEQ ID NO:95), Figure 97 (SEQ ID NO:97), Figure 99 (SEQ ID NO:99), Figure 101 (SEQ ID NO:101), Figure 103 (SEQ ID NO:103), Figure 105 (SEQ ID NO:105), Figure 107 (SEQ ID NO:107), Figure 109 (SEQ ID NO:109), Figure 111 (SEQ ID NO:111), Figure 113 (SEQ ID NO:113), Figure 115 (SEQ ID NO:115), Figure 117 (SEQ ID NO:117), Figure 119 (SEQ ID NO:119), Figure 121 (SEQ ID NO:121), Figure 123 (SEQ ID NO:123), Figure 125 (SEQ ID NO:125), Figure 127
15 (SEQ ID NO:127), Figure 129 (SEQ ID NO:129), Figure 131 (SEQ ID NO:131), Figure 133 (SEQ ID NO:133), Figure 135 (SEQ ID NO:135), Figure 137 (SEQ ID NO:137), Figure 139 (SEQ ID NO:139), Figure 141 (SEQ ID NO:141), Figure 143 (SEQ ID NO:143), Figure 145 (SEQ ID NO:145), Figure 147 (SEQ ID NO:147), Figure 149 (SEQ ID NO:149), Figure 151 (SEQ ID NO:151), Figure 153 (SEQ ID NO:153), Figure 155 (SEQ ID NO:155), Figure 157 (SEQ ID NO:157), Figure 159 (SEQ ID NO:159),
20 Figure 161 (SEQ ID NO:161), Figure 163 (SEQ ID NO:163), Figure 165 (SEQ ID NO:165), Figure 167 (SEQ ID NO:167), Figure 169 (SEQ ID NO:169), Figure 171 (SEQ ID NO:171), Figure 173 (SEQ ID NO:173), Figure 175 (SEQ ID NO:175), Figure 177 (SEQ ID NO:177), Figure 179 (SEQ ID NO:179), Figure 181 (SEQ ID NO:181), Figure 183 (SEQ ID NO:183), Figure 185 (SEQ ID NO:185), Figure 187 (SEQ ID NO:187), Figure 189 (SEQ ID NO:189), Figure 191 (SEQ ID NO:191), Figure 193 (SEQ ID
25 NO:193), Figure 195 (SEQ ID NO:195), Figure 197 (SEQ ID NO:197), Figure 199 (SEQ ID NO:199), Figure 201 (SEQ ID NO:201), Figure 203 (SEQ ID NO:203), Figure 205 (SEQ ID NO:205), Figure 207 (SEQ ID NO:207), Figure 209 (SEQ ID NO:209), Figure 211 (SEQ ID NO:211), Figure 213 (SEQ ID NO:213), Figure 215 (SEQ ID NO:215), Figure 217 (SEQ ID NO:217), Figure 219 (SEQ ID NO:219), Figure 221 (SEQ ID NO:221), Figure 225 (SEQ ID NO:225), Figure 227 (SEQ ID NO:227), Figure 229
30 (SEQ ID NO:229), Figure 232 (SEQ ID NO:232), Figure 235 (SEQ ID NO:235), Figure 237 (SEQ ID NO:237), Figure 239 (SEQ ID NO:239), Figure 243 (SEQ ID NO:243), Figure 246 (SEQ ID NO:246), Figure 248 (SEQ ID NO:248), Figure 250 (SEQ ID NO:250), Figure 252 (SEQ ID NO:252), Figure 254 (SEQ ID NO:254), Figure 256 (SEQ ID NO:256), Figure 258 (SEQ ID NO:258), Figure 260 (SEQ ID NO:260), Figure 262 (SEQ ID NO:262), Figure 264 (SEQ ID NO:264), Figure 266 (SEQ ID NO:266),
35 Figure 268 (SEQ ID NO:268), Figure 270 (SEQ ID NO:270), Figure 272 (SEQ ID NO:272), Figure 274 (SEQ ID NO:274), Figure 276 (SEQ ID NO:276), Figure 278 (SEQ ID NO:278), Figure 280 (SEQ ID NO:280), Figure 282 (SEQ ID NO:282), Figure 284 (SEQ ID NO:284), Figure 286 (SEQ ID NO:286), Figure 288 (SEQ ID NO:288), Figure 290 (SEQ ID NO:290), Figure 292 (SEQ ID NO:292), Figure 294

(SEQ ID NO:294), Figure 296 (SEQ ID NO:296), Figure 298 (SEQ ID NO:298), Figure 300 (SEQ ID NO:300), Figure 302 (SEQ ID NO:302), Figure 304 (SEQ ID NO:304), Figure 306 (SEQ ID NO:306), Figure 308 (SEQ ID NO:308), Figure 310 (SEQ ID NO:310), Figure 312A-B (SEQ ID NO:312), Figure 314 (SEQ ID NO:314), Figure 316 (SEQ ID NO:316), Figure 318 (SEQ ID NO:318), Figure 320 (SEQ ID NO:320), Figure 324 (SEQ ID NO:324), Figure 326 (SEQ ID NO:326), Figure 329 (SEQ ID NO:329), Figure 332 (SEQ ID NO:332), Figure 334 (SEQ ID NO:334), Figure 336 (SEQ ID NO:336), Figure 338 (SEQ ID NO:338), Figure 340 (SEQ ID NO:340), Figure 342 (SEQ ID NO:342), Figure 344 (SEQ ID NO:344), Figure 346 (SEQ ID NO:346), Figure 348 (SEQ ID NO:348), Figure 350 (SEQ ID NO:350), Figure 352 (SEQ ID NO:352), Figure 354 (SEQ ID NO:354), Figure 356 (SEQ ID NO:356), Figure 358 (SEQ ID NO:358), Figure 360 (SEQ ID NO:360), Figure 362 (SEQ ID NO:362), Figure 364 (SEQ ID NO:364), Figure 366 (SEQ ID NO:366), Figure 368 (SEQ ID NO:368), Figure 370 (SEQ ID NO:370), Figure 372 (SEQ ID NO:372), Figure 375 (SEQ ID NO:375), Figure 377 (SEQ ID NO:377), Figure 379 (SEQ ID NO:379), Figure 381 (SEQ ID NO:381), Figure 383 (SEQ ID NO:383), Figure 385 (SEQ ID NO:385), Figure 387 (SEQ ID NO:387), Figure 389 (SEQ ID NO:389), Figure 392 (SEQ ID NO:392), Figure 394 (SEQ ID NO:394), Figure 396 (SEQ ID NO:396), Figure 399 (SEQ ID NO:399), Figure 403 (SEQ ID NO:403), Figure 405 (SEQ ID NO:405), Figure 411 (SEQ ID NO:411), Figure 413 (SEQ ID NO:413), Figure 415 (SEQ ID NO:415), Figure 417 (SEQ ID NO:417), Figure 419 (SEQ ID NO:419), Figure 421 (SEQ ID NO:421), Figure 423 (SEQ ID NO:423), Figure 425 (SEQ ID NO:425), Figure 427 (SEQ ID NO:427), Figure 429 (SEQ ID NO:429), Figure 431 (SEQ ID NO:431), Figure 433 (SEQ ID NO:433), Figure 435 (SEQ ID NO:435), Figure 437 (SEQ ID NO:437), Figure 439 (SEQ ID NO:439), Figure 441 (SEQ ID NO:441), Figure 443 (SEQ ID NO:443), Figure 445 (SEQ ID NO:445), Figure 447 (SEQ ID NO:447), Figure 449 (SEQ ID NO:449), Figure 451 (SEQ ID NO:451), Figure 453 (SEQ ID NO:453), Figure 455 (SEQ ID NO:455), Figure 457 (SEQ ID NO:457), Figure 460 (SEQ ID NO:460), Figure 462 (SEQ ID NO:462), Figure 464 (SEQ ID NO:464), Figure 466 (SEQ ID NO:466), Figure 468 (SEQ ID NO:468), Figure 472 (SEQ ID NO:472), Figure 474 (SEQ ID NO:474), Figure 476 (SEQ ID NO:476), Figure 478 (SEQ ID NO:478), Figure 480 (SEQ ID NO:480), Figure 482 (SEQ ID NO:482), Figure 484 (SEQ ID NO:484), Figure 486 (SEQ ID NO:486), Figure 488 (SEQ ID NO:488), Figure 490 (SEQ ID NO:490), Figure 492 (SEQ ID NO:492), Figure 494 (SEQ ID NO:494), Figure 496 (SEQ ID NO:496), Figure 498 (SEQ ID NO:498), Figure 500 (SEQ ID NO:500), Figure 502 (SEQ ID NO:502), Figure 504 (SEQ ID NO:504) or Figure 506 (SEQ ID NO:506).

12. A chimeric molecule comprising a polypeptide according to Claim 10 fused to a heterologous amino acid sequence.

13. The chimeric molecule of Claim 12, wherein said heterologous amino acid sequence is an epitope tag sequence or an Fc region of an immunoglobulin.

14. An antibody which specifically binds to a polypeptide according to Claim 10.

15. The antibody of Claim 14, wherein said antibody is a monoclonal antibody, a humanized antibody or a single-chain antibody.

16. A composition of matter comprising (a) a polypeptide of Claim 10, (b) an agonist of said polypeptide, (c) an antagonist of said polypeptide, or (d) an antibody that binds to said polypeptide, in combination with a carrier.

17. The composition of matter of Claim 16, wherein said carrier is a pharmaceutically acceptable carrier.

18. The composition of matter of Claim 16 comprising a therapeutically effective amount of (a), (b), (c) or (d).

19. An article of manufacture, comprising:
a container;
a label on said container; and
a composition of matter comprising (a) a polypeptide of Claim 10, (b) an agonist of said polypeptide, (c) an antagonist of said polypeptide, or (d) an antibody that binds to said polypeptide, contained within said container, wherein label on said container indicates that said composition of matter can be used for treating an immune related disease.

20. A method of treating a B cell related disorder in a mammal in need thereof comprising administering to said mammal a therapeutically effective amount of (a) a polypeptide of Claim 10, (b) an agonist of said polypeptide, (c) an antagonist of said polypeptide, or (d) an antibody that binds to said polypeptide.

21. The method of Claim 20, wherein the immune related disorder is; systemic lupus erythematosus, X-linked infantile hypogammaglobulinemia, polysaccharide antigen unresponsiveness, selective IgA deficiency, selective IgM deficiency, selective deficiency of IgG subclasses, immunodeficiency with hyper Ig-M, transient hypogammaglobulinemia of infancy, Burkitt's lymphoma, Intermediate lymphoma, follicular lymphoma, typeII hypersensitivity, rheumatoid arthritis, autoimmune mediated hemolytic anemia, myasthenia gravis, hypoadrenocorticism, glomerulonephritis and ankylosing spondylitis.

22. A method for determining the presence of a PRO polypeptide in a sample suspected of containing said polypeptide, said method comprising exposing said sample to an anti-PRO12560, anti-PRO329, anti-PRO71236, anti-PRO1265, anti-PRO71045, anti-PRO71049, anti-PRO37162, anti-PRO160,

anti-PRO37534, anti-PRO37544, anti-PRO21787, anti-PRO34330, anti-PRO2540, anti-PRO7, anti-PRO34288, anti-PRO84690, anti-PRO2134, anti-PRO21928, anti-PRO23974, anti-PRO34457, anti-PRO37158, anti-PRO2537, anti-PRO36827, anti-PRO26296, anti-PRO36766, anti-PRO4912, anti-PRO4769, anti-PRO36899, anti-PRO33667, anti-PRO37695, anti-PRO38069, anti-PRO21716, anti-PRO36124, anti-PRO77694, anti-PRO37957, anti-PRO25114, anti-PRO37553, anti-PRO81979, anti-PRO6013, anti-PRO21960, anti-PRO34276, anti-PRO1717, anti-PRO34107, anti-PRO12612, anti-PRO37946, anti-PRO12865, anti-PRO37029, anti-PRO38337, anti-PRO4710, anti-PRO12570, anti-PRO12890, anti-PRO37121, anti-PRO3813, anti-PRO24934, anti-PRO12458, anti-PRO37843, anti-PRO37547, anti-PRO36300, anti-PRO37192, anti-PRO12832, anti-PRO25147, anti-PRO12876, anti-PRO12155, anti-PRO12370, anti-PRO12320, anti-PRO23370, anti-PRO25266, anti-PRO4785, anti-PRO4660, anti-PRO71095, anti-PRO4658, anti-PRO2757, anti-PRO12789, anti-PRO20128, anti-PRO2834, anti-PRO9998, anti-PRO84691, anti-PRO12904, anti-PRO4887, anti-PRO12082, anti-PRO37975, anti-PRO37653, anti-PRO4776, anti-PRO12073, anti-PRO38457, anti-PRO4767, anti-PRO12884, anti-PRO12586, anti-PRO84692, anti-PRO12280, anti-PRO23859, anti-PRO2577, anti-PRO37696, anti-PRO24075, anti-PRO71042, anti-PRO37639, anti-PRO84693, anti-PRO37272, anti-PRO84694, anti-PRO4330, anti-PRO84695, anti-PRO285, anti-PRO38310, anti-PRO37657, anti-PRO71061, anti-PRO209, anti-PRO37584, anti-PRO84696, anti-PRO4860, anti-PRO38492, anti-PRO11738, anti-PRO69476, anti-PRO12032, anti-PRO69484, anti-PRO23460, anti-PRO84476, anti-PRO84697, anti-PRO71207, anti-PRO28714, anti-PRO84698, anti-PRO49839, anti-PRO84441, anti-PRO49214, anti-PRO50523, anti-PRO50241, anti-PRO83773, anti-PRO84699, anti-PRO50772, anti-PRO49326, anti-PRO49824, anti-PRO70333, anti-PRO83673, anti-PRO50332, anti-PRO51295, anti-PRO51621, anti-PRO34958, anti-PRO50821, anti-PRO84700, anti-PRO84701, anti-PRO60333, anti-PRO50187, anti-PRO48357, anti-PRO50365, anti-PRO84702, anti-PRO49810, anti-PRO58710, anti-PRO69503, anti-PRO49564, anti-PRO84703, anti-PRO84663, anti-PRO83800, anti-PRO84704, anti-PRO84705, anti-PRO84706, anti-PRO57996, anti-PRO84368, anti-PRO84496, anti-PRO84707, anti-PRO49765, anti-PRO23253, anti-PRO84709, anti-PRO82352, anti-PRO82903, anti-PRO83260, anti-PRO83681, anti-PRO69487, anti-PRO83148, anti-PRO58958, anti-PRO58399, anti-PRO80649, anti-PRO58425, anti-PRO84376, anti-PRO84309, anti-PRO59142, anti-PRO58810, anti-PRO84710, anti-PRO80648, anti-PRO84711, anti-PRO84712, anti-PRO82872, anti-PRO84714, anti-PRO84183, anti-PRO83879, anti-PRO84715, anti-PRO84716, anti-PRO84717, anti-PRO71206, anti-PRO51950, anti-PRO71035, anti-PRO52268, anti-PRO52040, anti-PRO71288, anti-PRO69458, anti-PRO69903, anti-PRO52672, anti-PRO52174, anti-PRO71289, anti-PRO58230, anti-PRO71238, anti-PRO84718, anti-PRO69632, anti-PRO4913, anti-PRO84265, anti-PRO84719, anti-PRO57922, anti-PRO12613, anti-PRO62312, anti-PRO60891, anti-PRO84720, anti-PRO84721, anti-PRO84722, anti-PRO4854, anti-PRO59611, anti-PRO60271, anti-PRO63074, anti-PRO84723, anti-PRO84724, anti-PRO35972, anti-PRO84434, anti-PRO59476, anti-PRO84725, anti-PRO84726, anti-PRO84727, anti-PRO84728, anti-PRO84729, anti-PRO84730, anti-PRO84731, anti-PRO21326, anti-PRO69478, anti-PRO80846, anti-PRO84611, anti-PRO61948, anti-PRO84732, anti-PRO84733, anti-PRO59776, anti-PRO84734, anti-

PRO83839, anti-PRO69472, anti-PRO23253, anti-PRO84735 or anti-PRO37583 antibody and determining binding of said antibody to a component of said sample.

23. A method of diagnosing a B cell related disease in a mammal, said method comprising
- 5 detecting the level of expression of a gene encoding PRO12560, PRO329, PRO71236, PRO1265, PRO71045, PRO71049, PRO37162, PRO160, PRO37534, PRO37544, PRO21787, PRO34330, PRO2540, PRO7, PRO34288, PRO84690, PRO2134, PRO21928, PRO23974, PRO34457, PRO37158, PRO2537, PRO36827, PRO26296, PRO36766, PRO4912, PRO4769, PRO36899, PRO33667, PRO37695, PRO38069, PRO21716, PRO36124, PRO77694, PRO37957, PRO25114, PRO37553,
- 10 PRO81979, PRO6013, PRO21960, PRO34276, PRO1717, PRO34107, PRO12612, PRO37946, PRO12865, PRO37029, PRO38337, PRO4710, PRO12570, PRO12890, PRO37121, PRO3813, PRO24934, PRO12458, PRO37843, PRO37547, PRO36300, PRO37192, PRO12832, PRO25147, PRO12876, PRO12155, PRO12370, PRO12320, PRO23370, PRO25266, PRO4785, PRO4660, PRO71095, PRO4658, PRO2757, PRO12789, PRO20128, PRO2834, PRO9998, PRO84691, PRO12904,
- 15 PRO4887, PRO12082, PRO37975, PRO37653, PRO4776, PRO12073, PRO38457, PRO4767, PRO12884, PRO12586, PRO84692, PRO12280, PRO23859, PRO2577, PRO37696, PRO24075, PRO71042, PRO37639, PRO84693, PRO37272, PRO84694, PRO4330, PRO84695, PRO285, PRO38310, PRO37657, PRO71061, PRO209, PRO37584, PRO84696, PRO4860, PRO38492, PRO11738, PRO69476, PRO12032, PRO69484, PRO23460, PRO84476, PRO84697, PRO71207,
- 20 PRO28714, PRO84698, PRO49839, PRO84441, PRO49214, PRO50523, PRO50241, PRO83773, PRO84699, PRO50772, PRO49326, PRO49824, PRO70333, PRO83673, PRO50332, PRO51295, PRO51621, PRO34958, PRO50821, PRO84700, PRO84701, PRO60333, PRO50187, PRO48357, PRO50365, PRO84702, PRO49810, PRO58710, PRO69503, PRO49564, PRO84703, PRO84663, PRO83800, PRO84704, PRO84705, PRO84706, PRO57996, PRO84368, PRO84496, PRO84707,
- 25 PRO49765, PRO23253, PRO84709, PRO82352, PRO82903, PRO83260, PRO83681, PRO69487, PRO83148, PRO58958, PRO58399, PRO80649, PRO58425, PRO84376, PRO84309, PRO59142, PRO58810, PRO84710, PRO80648, PRO84711, PRO84712, PRO82872, PRO84714, PRO84183, PRO83879, PRO84715, PRO84716, PRO84717, PRO71206, PRO51950, PRO71035, PRO52268, PRO52040, PRO71288, PRO69458, PRO69903, PRO52672, PRO52174, PRO71289, PRO58230,
- 30 PRO71238, PRO84718, PRO69632, PRO4913, PRO84265, PRO84719, PRO57922, PRO12613, PRO62312, PRO60891, PRO84720, PRO84721, PRO84722, PRO4854, PRO59611, PRO60271, PRO63074, PRO84723, PRO84724, PRO35972, PRO84434, PRO59476, PRO84725, PRO84726, PRO84727, PRO84728, PRO84729, PRO84730, PRO84731, PRO21326, PRO69478, PRO80846, PRO84611, PRO61948, PRO84732, PRO84733, PRO59776, PRO84734, PRO83839, PRO69472,
- 35 PRO23253, PRO84735 or PRO37583 polypeptide (a) in a test sample of tissue cells obtained from the mammal, and (b) in a control sample of known normal tissue cells of the same cell type, wherein a higher or lower level of expression of said gene in the test sample as compared to the control sample is indicative of the presence of B cell related disease in the mammal from which the test tissue cells were obtained.

24. A method of diagnosing a B cell related disease in a mammal, said method comprising

(a) contacting an anti-PRO12560, anti-PRO329, anti-PRO71236, anti-PRO1265, anti-PRO71045, anti-PRO71049, anti-PRO37162, anti-PRO160, anti-PRO37534, anti-PRO37544, anti-PRO21787, anti-PRO34330, anti-PRO2540, anti-PRO7, anti-PRO34288, anti-PRO84690, anti-PRO2134, anti-PRO21928, anti-PRO23974, anti-PRO34457, anti-PRO37158, anti-PRO2537, anti-PRO36827, anti-PRO26296, anti-PRO36766, anti-PRO4912, anti-PRO4769, anti-PRO36899, anti-PRO33667, anti-PRO37695, anti-PRO38069, anti-PRO21716, anti-PRO36124, anti-PRO77694, anti-PRO37957, anti-PRO25114, anti-PRO37553, anti-PRO81979, anti-PRO6013, anti-PRO21960, anti-PRO34276, anti-PRO1717, anti-PRO34107, anti-PRO12612, anti-PRO37946, anti-PRO12865, anti-PRO37029, anti-PRO38337, anti-PRO4710, anti-PRO12570, anti-PRO12890, anti-PRO37121, anti-PRO3813, anti-PRO24934, anti-PRO12458, anti-PRO37843, anti-PRO37547, anti-PRO36300, anti-PRO37192, anti-PRO12832, anti-PRO25147, anti-PRO12876, anti-PRO12155, anti-PRO12370, anti-PRO12320, anti-PRO23370, anti-PRO25266, anti-PRO4785, anti-PRO4660, anti-PRO71095, anti-PRO4658, anti-PRO2757, anti-PRO12789, anti-PRO20128, anti-PRO2834, anti-PRO9998, anti-PRO84691, anti-PRO12904, anti-PRO4887, anti-PRO12082, anti-PRO37975, anti-PRO37653, anti-PRO4776, anti-PRO12073, anti-PRO38457, anti-PRO4767, anti-PRO12884, anti-PRO12586, anti-PRO84692, anti-PRO12280, anti-PRO23859, anti-PRO2577, anti-PRO37696, anti-PRO24075, anti-PRO71042, anti-PRO37639, anti-PRO84693, anti-PRO37272, anti-PRO84694, anti-PRO4330, anti-PRO84695, anti-PRO285, anti-PRO38310, anti-PRO37657, anti-PRO71061, anti-PRO209, anti-PRO37584, anti-PRO84696, anti-PRO4860, anti-PRO38492, anti-PRO11738, anti-PRO69476, anti-PRO12032, anti-PRO69484, anti-PRO23460, anti-PRO84476, anti-PRO84697, anti-PRO71207, anti-PRO28714, anti-PRO84698, anti-PRO49839, anti-PRO84441, anti-PRO49214, anti-PRO50523, anti-PRO50241, anti-PRO83773, anti-PRO84699, anti-PRO50772, anti-PRO49326, anti-PRO49824, anti-PRO70333, anti-PRO83673, anti-PRO50332, anti-PRO51295, anti-PRO51621, anti-PRO34958, anti-PRO50821, anti-PRO84700, anti-PRO84701, anti-PRO60333, anti-PRO50187, anti-PRO48357, anti-PRO50365, anti-PRO84702, anti-PRO49810, anti-PRO58710, anti-PRO69503, anti-PRO49564, anti-PRO84703, anti-PRO84663, anti-PRO83800, anti-PRO84704, anti-PRO84705, anti-PRO84706, anti-PRO57996, anti-PRO84368, anti-PRO84496, anti-PRO84707, anti-PRO49765, anti-PRO23253, anti-PRO84709, anti-PRO82352, anti-PRO82903, anti-PRO83260, anti-PRO83681, anti-PRO69487, anti-PRO83148, anti-PRO58958, anti-PRO58399, anti-PRO80649, anti-PRO58425, anti-PRO84376, anti-PRO84309, anti-PRO59142, anti-PRO58810, anti-PRO84710, anti-PRO80648, anti-PRO84711, anti-PRO84712, anti-PRO82872, anti-PRO84714, anti-PRO84183, anti-PRO83879, anti-PRO84715, anti-PRO84716, anti-PRO84717, anti-PRO71206, anti-PRO51950, anti-PRO71035, anti-PRO52268, anti-PRO52040, anti-PRO71288, anti-PRO69458, anti-PRO69903, anti-PRO52672, anti-PRO52174, anti-PRO71289, anti-PRO58230, anti-PRO71238, anti-PRO84718, anti-PRO69632, anti-PRO4913, anti-PRO84265, anti-PRO84719, anti-PRO57922, anti-PRO12613, anti-PRO62312, anti-PRO60891, anti-PRO84720, anti-PRO84721, anti-PRO84722, anti-PRO4854, anti-PRO59611, anti-PRO60271, anti-PRO63074, anti-PRO84723, anti-

PRO84724, anti-PRO35972, anti-PRO84434, anti-PRO59476, anti-PRO84725, anti-PRO84726, anti-PRO84727, anti-PRO84728, anti-PRO84729, anti-PRO84730, anti-PRO84731, anti-PRO21326, anti-PRO69478, anti-PRO80846, anti-PRO84611, anti-PRO61948, anti-PRO84732, anti-PRO84733, anti-PRO59776, anti-PRO84734, anti-PRO83839, anti-PRO69472, anti-PRO23253, anti-PRO84735 or anti-PRO37583 antibody with a test sample of tissue cells obtained from said mammal and (b) detecting the formation of a complex between the antibody and the polypeptide in the test sample, wherein formation of said complex is indicative of the presence of an immune related disease in the mammal from which the test tissue cells were obtained.

25. A method of identifying a compound that inhibits the activity of PRO12560, PRO329, PRO71236, PRO1265, PRO71045, PRO71049, PRO37162, PRO160, PRO37534, PRO37544, PRO21787, PRO34330, PRO2540, PRO7, PRO34288, PRO84690, PRO2134, PRO21928, PRO23974, PRO34457, PRO37158, PRO2537, PRO36827, PRO26296, PRO36766, PRO4912, PRO4769, PRO36899, PRO33667, PRO37695, PRO38069, PRO21716, PRO36124, PRO77694, PRO37957, PRO25114, PRO37553, PRO81979, PRO6013, PRO21960, PRO34276, PRO1717, PRO34107, PRO12612, PRO37946, PRO12865, PRO37029, PRO38337, PRO4710, PRO12570, PRO12890, PRO37121, PRO3813, PRO24934, PRO12458, PRO37843, PRO37547, PRO36300, PRO37192, PRO12832, PRO25147, PRO12876, PRO12155, PRO12370, PRO12320, PRO23370, PRO25266, PRO4785, PRO4660, PRO71095, PRO4658, PRO2757, PRO12789, PRO20128, PRO2834, PRO9998, PRO84691, PRO12904, PRO4887, PRO12082, PRO37975, PRO37653, PRO4776, PRO12073, PRO38457, PRO4767, PRO12884, PRO12586, PRO84692, PRO12280, PRO23859, PRO2577, PRO37696, PRO24075, PRO71042, PRO37639, PRO84693, PRO37272, PRO84694, PRO4330, PRO84695, PRO285, PRO38310, PRO37657, PRO71061, PRO209, PRO37584, PRO84696, PRO4860, PRO38492, PRO11738, PRO69476, PRO12032, PRO69484, PRO23460, PRO84476, PRO84697, PRO71207, PRO28714, PRO84698, PRO49839, PRO84441, PRO49214, PRO50523, PRO50241, PRO83773, PRO84699, PRO50772, PRO49326, PRO49824, PRO70333, PRO83673, PRO50332, PRO51295, PRO51621, PRO34958, PRO50821, PRO84700, PRO84701, PRO60333, PRO50187, PRO48357, PRO50365, PRO84702, PRO49810, PRO58710, PRO69503, PRO49564, PRO84703, PRO84663, PRO83800, PRO84704, PRO84705, PRO84706, PRO57996, PRO84368, PRO84496, PRO84707, PRO49765, PRO23253, PRO84709, PRO82352, PRO82903, PRO83260, PRO83681, PRO69487, PRO83148, PRO58958, PRO58399, PRO80649, PRO58425, PRO84376, PRO84309, PRO59142, PRO58810, PRO84710, PRO80648, PRO84711, PRO84712, PRO82872, PRO84714, PRO84183, PRO83879, PRO84715, PRO84716, PRO84717, PRO71206, PRO51950, PRO71035, PRO52268, PRO52040, PRO71288, PRO69458, PRO69903, PRO52672, PRO52174, PRO71289, PRO58230, PRO71238, PRO84718, PRO69632, PRO4913, PRO84265, PRO84719, PRO57922, PRO12613, PRO62312, PRO60891, PRO84720, PRO84721, PRO84722, PRO4854, PRO59611, PRO60271, PRO63074, PRO84723, PRO84724, PRO35972, PRO84434, PRO59476, PRO84725, PRO84726, PRO84727, PRO84728, PRO84729, PRO84730, PRO84731, PRO21326, PRO69478,

PRO80846, PRO84611, PRO61948, PRO84732, PRO84733, PRO59776, PRO84734, PRO83839, PRO69472, PRO23253, PRO84735 or PRO37583 polypeptide, said method comprising contacting cells which normally respond to said polypeptide with (a) said polypeptide and (b) a candidate compound, and determining the lack responsiveness by said cell to (a).

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26. A method of identifying a compound that inhibits the expression of a gene encoding a PRO12560, PRO329, PRO71236, PRO1265, PRO71045, PRO71049, PRO37162, PRO160, PRO37534, PRO37544, PRO21787, PRO34330, PRO2540, PRO7, PRO34288, PRO84690, PRO2134, PRO21928, PRO23974, PRO34457, PRO37158, PRO2537, PRO36827, PRO26296, PRO36766, PRO4912, PRO4769, PRO36899, PRO33667, PRO37695, PRO38069, PRO21716, PRO36124, PRO77694, PRO37957, PRO25114, PRO37553, PRO81979, PRO6013, PRO21960, PRO34276, PRO1717, PRO34107, PRO12612, PRO37946, PRO12865, PRO37029, PRO38337, PRO4710, PRO12570, PRO12890, PRO37121, PRO3813, PRO24934, PRO12458, PRO37843, PRO37547, PRO36300, PRO37192, PRO12832, PRO25147, PRO12876, PRO12155, PRO12370, PRO12320, PRO23370, PRO25266, PRO4785, PRO4660, PRO71095, PRO4658, PRO2757, PRO12789, PRO20128, PRO2834, PRO9998, PRO84691, PRO12904, PRO4887, PRO12082, PRO37975, PRO37653, PRO4776, PRO12073, PRO38457, PRO4767, PRO12884, PRO12586, PRO84692, PRO12280, PRO23859, PRO2577, PRO37696, PRO24075, PRO71042, PRO37639, PRO84693, PRO37272, PRO84694, PRO4330, PRO84695, PRO285, PRO38310, PRO37657, PRO71061, PRO209, PRO37584, PRO84696, PRO4860, PRO38492, PRO11738, PRO69476, PRO12032, PRO69484, PRO23460, PRO84476, PRO84697, PRO71207, PRO28714, PRO84698, PRO49839, PRO84441, PRO49214, PRO50523, PRO50241, PRO83773, PRO84699, PRO50772, PRO49326, PRO49824, PRO70333, PRO83673, PRO50332, PRO51295, PRO51621, PRO34958, PRO50821, PRO84700, PRO84701, PRO60333, PRO50187, PRO48357, PRO50365, PRO84702, PRO49810, PRO58710, PRO69503, PRO49564, PRO84703, PRO84663, PRO83800, PRO84704, PRO84705, PRO84706, PRO57996, PRO84368, PRO84496, PRO84707, PRO49765, PRO23253, PRO84709, PRO82352, PRO82903, PRO83260, PRO83681, PRO69487, PRO83148, PRO58958, PRO58399, PRO80649, PRO58425, PRO84376, PRO84309, PRO59142, PRO58810, PRO84710, PRO80648, PRO84711, PRO84712, PRO82872, PRO84714, PRO84183, PRO83879, PRO84715, PRO84716, PRO84717, PRO71206, PRO51950, PRO71035, PRO52268, PRO52040, PRO71288, PRO69458, PRO69903, PRO52672, PRO52174, PRO71289, PRO58230, PRO71238, PRO84718, PRO69632, PRO4913, PRO84265, PRO84719, PRO57922, PRO12613, PRO62312, PRO60891, PRO84720, PRO84721, PRO84722, PRO4854, PRO59611, PRO60271, PRO63074, PRO84723, PRO84724, PRO35972, PRO84434, PRO59476, PRO84725, PRO84726, PRO84727, PRO84728, PRO84729, PRO84730, PRO84731, PRO21326, PRO69478, PRO80846, PRO84611, PRO61948, PRO84732, PRO84733, PRO59776, PRO84734, PRO83839, PRO69472, PRO23253, PRO84735 or PRO37583 polypeptide, said method comprising contacting cells which normally express said polypeptide with a candidate compound, and determining the lack of expression said gene.

27. The method of Claim 26, wherein said candidate compound is an antisense nucleic acid.

28. A method of identifying a compound that mimics the activity of a PRO12560, PRO329,
5 PRO71236, PRO1265, PRO71045, PRO71049, PRO37162, PRO160, PRO37534, PRO37544,
PRO21787, PRO34330, PRO2540, PRO7, PRO34288, PRO84690, PRO2134, PRO21928, PRO23974,
PRO34457, PRO37158, PRO2537, PRO36827, PRO26296, PRO36766, PRO4912, PRO4769,
PRO36899, PRO33667, PRO37695, PRO38069, PRO21716, PRO36124, PRO77694, PRO37957,
PRO25114, PRO37553, PRO81979, PRO6013, PRO21960, PRO34276, PRO1717, PRO34107,
10 PRO12612, PRO37946, PRO12865, PRO37029, PRO38337, PRO4710, PRO12570, PRO12890,
PRO37121, PRO3813, PRO24934, PRO12458, PRO37843, PRO37547, PRO36300, PRO37192,
PRO12832, PRO25147, PRO12876, PRO12155, PRO12370, PRO12320, PRO23370, PRO25266,
PRO4785, PRO4660, PRO71095, PRO4658, PRO2757, PRO12789, PRO20128, PRO2834, PRO9998,
PRO84691, PRO12904, PRO4887, PRO12082, PRO37975, PRO37653, PRO4776, PRO12073,
15 PRO38457, PRO4767, PRO12884, PRO12586, PRO84692, PRO12280, PRO23859, PRO2577,
PRO37696, PRO24075, PRO71042, PRO37639, PRO84693, PRO37272, PRO84694, PRO4330,
PRO84695, PRO285, PRO38310, PRO37657, PRO71061, PRO209, PRO37584, PRO84696, PRO4860,
PRO38492, PRO11738, PRO69476, PRO12032, PRO69484, PRO23460, PRO84476, PRO84697,
PRO71207, PRO28714, PRO84698, PRO49839, PRO84441, PRO49214, PRO50523, PRO50241,
20 PRO83773, PRO84699, PRO50772, PRO49326, PRO49824, PRO70333, PRO83673, PRO50332,
PRO51295, PRO51621, PRO34958, PRO50821, PRO84700, PRO84701, PRO60333, PRO50187,
PRO48357, PRO50365, PRO84702, PRO49810, PRO58710, PRO69503, PRO49564, PRO84703,
PRO84663, PRO83800, PRO84704, PRO84705, PRO84706, PRO57996, PRO84368, PRO84496,
PRO84707, PRO49765, PRO23253, PRO84709, PRO82352, PRO82903, PRO83260, PRO83681,
25 PRO69487, PRO83148, PRO58958, PRO58399, PRO80649, PRO58425, PRO84376, PRO84309,
PRO59142, PRO58810, PRO84710, PRO80648, PRO84711, PRO84712, PRO82872, PRO84714,
PRO84183, PRO83879, PRO84715, PRO84716, PRO84717, PRO71206, PRO51950, PRO71035,
PRO52268, PRO52040, PRO71288, PRO69458, PRO69903, PRO52672, PRO52174, PRO71289,
PRO58230, PRO71238, PRO84718, PRO69632, PRO4913, PRO84265, PRO84719, PRO57922,
30 PRO12613, PRO62312, PRO60891, PRO84720, PRO84721, PRO84722, PRO4854, PRO59611,
PRO60271, PRO63074, PRO84723, PRO84724, PRO35972, PRO84434, PRO59476, PRO84725,
PRO84726, PRO84727, PRO84728, PRO84729, PRO84730, PRO84731, PRO21326, PRO69478,
PRO80846, PRO84611, PRO61948, PRO84732, PRO84733, PRO59776, PRO84734, PRO83839,
PRO69472, PRO23253, PRO84735 or PRO37583 polypeptide, said method comprising contacting cells
35 which normally respond to said polypeptide with a candidate compound, and determining the
responsiveness by said cell to said candidate compound.

31. A method of stimulating the B cell response in a mammal, said method comprising

administering to said mammal an effective amount of a PRO12560, PRO329, PRO71236, PRO1265, PRO71045, PRO71049, PRO37162, PRO160, PRO37534, PRO37544, PRO21787, PRO34330, PRO2540, PRO7, PRO34288, PRO84690, PRO2134, PRO21928, PRO23974, PRO34457, PRO37158, PRO2537, PRO36827, PRO26296, PRO36766, PRO4912, PRO4769, PRO36899, PRO33667, PRO37695, PRO38069, PRO21716, PRO36124, PRO77694, PRO37957, PRO25114, PRO37553, PRO81979, PRO6013, PRO21960, PRO34276, PRO1717, PRO34107, PRO12612, PRO37946, PRO12865, PRO37029, PRO38337, PRO4710, PRO12570, PRO12890, PRO37121, PRO3813, PRO24934, PRO12458, PRO37843, PRO37547, PRO36300, PRO37192, PRO12832, PRO25147, PRO12876, PRO12155, PRO12370, PRO12320, PRO23370, PRO25266, PRO4785, PRO4660, PRO71095, PRO4658, PRO2757, PRO12789, PRO20128, PRO2834, PRO9998, PRO84691, PRO12904, PRO4887, PRO12082, PRO37975, PRO37653, PRO4776, PRO12073, PRO38457, PRO4767, PRO12884, PRO12586, PRO84692, PRO12280, PRO23859, PRO2577, PRO37696, PRO24075, PRO71042, PRO37639, PRO84693, PRO37272, PRO84694, PRO4330, PRO84695, PRO285, PRO38310, PRO37657, PRO71061, PRO209, PRO37584, PRO84696, PRO4860, PRO38492, PRO11738, PRO69476, PRO12032, PRO69484, PRO23460, PRO84476, PRO84697, PRO71207, PRO28714, PRO84698, PRO49839, PRO84441, PRO49214, PRO50523, PRO50241, PRO83773, PRO84699, PRO50772, PRO49326, PRO49824, PRO70333, PRO83673, PRO50332, PRO51295, PRO51621, PRO34958, PRO50821, PRO84700, PRO84701, PRO60333, PRO50187, PRO48357, PRO50365, PRO84702, PRO49810, PRO58710, PRO69503, PRO49564, PRO84703, PRO84663, PRO83800, PRO84704, PRO84705, PRO84706, PRO57996, PRO84368, PRO84496, PRO84707, PRO49765, PRO23253, PRO84709, PRO82352, PRO82903, PRO83260, PRO83681, PRO69487, PRO83148, PRO58958, PRO58399, PRO80649, PRO58425, PRO84376, PRO84309, PRO59142, PRO58810, PRO84710, PRO80648, PRO84711, PRO84712, PRO82872, PRO84714, PRO84183, PRO83879, PRO84715, PRO84716, PRO84717, PRO71206, PRO51950, PRO71035, PRO52268, PRO52040, PRO71288, PRO69458, PRO69903, PRO52672, PRO52174, PRO71289, PRO58230, PRO71238, PRO84718, PRO69632, PRO4913, PRO84265, PRO84719, PRO57922, PRO12613, PRO62312, PRO60891, PRO84720, PRO84721, PRO84722, PRO4854, PRO59611, PRO60271, PRO63074, PRO84723, PRO84724, PRO35972, PRO84434, PRO59476, PRO84725, PRO84726, PRO84727, PRO84728, PRO84729, PRO84730, PRO84731, PRO21326, PRO69478, PRO80846, PRO84611, PRO61948, PRO84732, PRO84733, PRO59776, PRO84734, PRO83839, PRO69472, PRO23253, PRO84735 or PRO37583 polypeptide antagonist, wherein said B cell response is stimulated.

32. A method of diagnosing a B-cell mediated immune response in a mammal, said method comprising detecting the level of expression of a gene encoding PRO12560, PRO329, PRO71236, PRO1265, PRO71045, PRO71049, PRO37162, PRO160, PRO37534, PRO37544, PRO21787, PRO34330, PRO2540, PRO7, PRO34288, PRO84690, PRO2134, PRO21928, PRO23974, PRO34457, PRO37158, PRO2537, PRO36827, PRO26296, PRO36766, PRO4912, PRO4769, PRO36899, PRO33667, PRO37695, PRO38069, PRO21716, PRO36124, PRO77694, PRO37957, PRO25114,

PRO37553, PRO81979, PRO6013, PRO21960, PRO34276, PRO1717, PRO34107, PRO12612,
PRO37946, PRO12865, PRO37029, PRO38337, PRO4710, PRO12570, PRO12890, PRO37121,
PRO3813, PRO24934, PRO12458, PRO37843, PRO37547, PRO36300, PRO37192, PRO12832,
PRO25147, PRO12876, PRO12155, PRO12370, PRO12320, PRO23370, PRO25266, PRO4785,
5 PRO4660, PRO71095, PRO4658, PRO2757, PRO12789, PRO20128, PRO2834, PRO9998, PRO84691,
PRO12904, PRO4887, PRO12082, PRO37975, PRO37653, PRO4776, PRO12073, PRO38457,
PRO4767, PRO12884, PRO12586, PRO84692, PRO12280, PRO23859, PRO2577, PRO37696,
PRO24075, PRO71042, PRO37639, PRO84693, PRO37272, PRO84694, PRO4330, PRO84695,
PRO285, PRO38310, PRO37657, PRO71061, PRO209, PRO37584, PRO84696, PRO4860, PRO38492,
10 PRO11738, PRO69476, PRO12032, PRO69484, PRO23460, PRO84476, PRO84697, PRO71207,
PRO28714, PRO84698, PRO49839, PRO84441, PRO49214, PRO50523, PRO50241, PRO83773,
PRO84699, PRO50772, PRO49326, PRO49824, PRO70333, PRO83673, PRO50332, PRO51295,
PRO51621, PRO34958, PRO50821, PRO84700, PRO84701, PRO60333, PRO50187, PRO48357,
PRO50365, PRO84702, PRO49810, PRO58710, PRO69503, PRO49564, PRO84703, PRO84663,
15 PRO83800, PRO84704, PRO84705, PRO84706, PRO57996, PRO84368, PRO84496, PRO84707,
PRO49765, PRO23253, PRO84709, PRO82352, PRO82903, PRO83260, PRO83681, PRO69487,
PRO83148, PRO58958, PRO58399, PRO80649, PRO58425, PRO84376, PRO84309, PRO59142,
PRO58810, PRO84710, PRO80648, PRO84711, PRO84712, PRO82872, PRO84714, PRO84183,
PRO83879, PRO84715, PRO84716, PRO84717, PRO71206, PRO51950, PRO71035, PRO52268,
20 PRO52040, PRO71288, PRO69458, PRO69903, PRO52672, PRO52174, PRO71289, PRO58230,
PRO71238, PRO84718, PRO69632, PRO4913, PRO84265, PRO84719, PRO57922, PRO12613,
PRO62312, PRO60891, PRO84720, PRO84721, PRO84722, PRO4854, PRO59611, PRO60271,
PRO63074, PRO84723, PRO84724, PRO35972, PRO84434, PRO59476, PRO84725, PRO84726,
PRO84727, PRO84728, PRO84729, PRO84730, PRO84731, PRO21326, PRO69478, PRO80846,
25 PRO84611, PRO61948, PRO84732, PRO84733, PRO59776, PRO84734, PRO83839, PRO69472,
PRO23253, PRO84735 or PRO37583 polypeptide (a) in a test sample of tissue cells obtained from the
mammal, and (b) in a control sample of known normal tissue cells of the same cell type, wherein a higher
or lower level of expression of said gene in the test sample as compared to the control sample is indicative
of the presence of a B cell mediated immune response in the mammal from which the test tissue cells were
30 obtained.